Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A solid oxide fuel cell which is characterized in that a solid oxide fuel cell having a fuel electrode, an electrolyte, and an air electrode is produced, wherein four sides or opposite two sides of corners of a single cell are downwardly bent in an inverted U shape, and gas channels are integrally formed in an inner side and/or an outer side of ~~the same.~~ said single cell.

2. (Currently Amended) The cell according to claim 1, wherein said single cell has gas channels in an inner and/or outer portion of ~~the same~~ said single cell as a porous fuel electrode ~~support~~ substrate having a triple film or multiple films in which an electrolyte is densely coated on ~~or in the~~ entire upper surface of the ~~flat plate~~ porous fuel electrode substrate and ~~the~~ entire ~~portions~~ portion of ~~the~~ a bent portion ~~and support~~ or a part portion of the ~~same in a~~ single cell in which corner portions are downwardly bent in the vertical direction, and a porous air electrode is coated on the upper ~~portion~~ surface in which the electrolyte is coated.

3. (Currently Amended) The cell according to claim 2, wherein said fuel electrode ~~support,~~ substrate, the gas channel are formed ~~in a structure or a lattice structure in a straight line.~~ with a straight-line shaped morphology or a lattice-type shaped morphology.

4. (Currently Amended) The cell according to claim 2, wherein ~~the cross sections of the downwardly bent portions and the straight structure or the lattice structure of the~~ a cross morphology of a straight-line shaped or lattice-type shaped gas channel formed in the fuel electrode ~~support may be formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle, or may have a structure in~~

~~which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.~~ substrate of the single cell includes a trapezoid shape in which a rectangular, circular or rectangular protrusion is formed at an obtuse angle.

5. (Currently Amended) The cell according to claim 1, wherein said single cell ~~is formed of a triple layer or multiple layer porous air electrode support~~ has gas channels in an inner and/or outer portion of the single cell as a porous air electrode substrate having a triple film or multiple films in which an electrolyte is densely coated ~~in the~~ on an entire ~~portions of the~~ lower surface of ~~a flat portion~~ the air electrode substrate and entire portions of a bent portion or a part portion of the single cell in which ~~an end portion is vertically and downwardly bent, and in the entire portions or a partial portion of the bent portion and the support,~~ corner portions are downwardly bent in a vertical direction, and a porous fuel electrode is coated on the lower ~~portion~~ surface on which the electrolyte is coated.~~, said single cell having gas channels in an inner side and/or outer side.~~

6. (Currently Amended) The cell according to claim 5, wherein said air electrode ~~support,~~ substrate, the gas channels are formed ~~in a straight line structure or a lattice structure.~~ with a straight-line shaped morphology or a lattice-type shaped morphology.

7. (Currently Amended) The cell according to claim 5, wherein ~~cross sections of the downwardly bent portions and the straight structure or the lattice structure of~~ a cross section morphology of straight-line shaped or lattice-type shaped gas channels formed in the air electrode ~~support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.~~ substrate of the single cell includes a trapezoid shape in which a rectangular, circular or rectangular protrusion is formed at an obtuse angle.

8. (Currently Amended) The cell according to claim 1, wherein said single cell ~~is formed of an electrolyte support formed of a triple layer or a multiple layer in which a fuel electrode is coated in a lower portion of a flat portion in which an end portion is vertically and downwardly bent, and an air electrode is coated on an upper portion of the electrolyte, said single cell having gas channels in an inner side and/or an outer side.~~ has gas channels in an inner and/or outer portion of the single cell as a dense electrolyte substrate having a triple film or multiple films in which an porous air electrode is coated on entire upper surface of the electrolyte substrate and entire portions of a bent portion or a part portion of the single cell in which corner portions are downwardly bent in a vertical direction, and a porous fuel electrode is coated on a lower surface in which the electrolyte is coated.

9. (Currently Amended) The cell according to claim 8, wherein said electrolyte ~~support,~~ substrate, the gas channels are formed in ~~a straight line structure or a lattice structure.~~ a straight-line shaped morphology or a lattice-type shaped morphology.

10. (Currently Amended) The cell according to claim 8, wherein ~~cross sections of the downwardly bent portions and the straight structure or the lattice structure of~~ a cross section morphology of straight-line shaped or lattice-type shaped gas channels formed in the electrolyte ~~support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.~~ substrate of the single cell includes a trapezoid shape in which a rectangular, circular or rectangular protrusion is formed at an obtuse angle.

11. (Previously Presented) The cell according to claim 1, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air

electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

12. (Previously Presented) The cell according to claim 8, wherein an electrolyte plate is produced in a structure in which four sides or two sides of corners are downwardly bent in an inverted U shape using an assembling powder of about 10μm through about 100μm using one or more solid oxide electrolyte materials selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, and lanthanum perovskite group, and the electrolyte support is implemented in such a manner that the single cells formed by coating a fuel electrode in a lower portion of the electrolyte flat portion and an air electrode in an upper portion of the electrolyte are formed in a triple layer or multiple layer structure.

13. (Currently Amended) The cell according to claim 3, wherein ~~the cross sections of the downwardly bent portions and the straight structure or the lattice structure of the~~ a cross morphology of the straight-line shaped or lattice-type shaped gas channel formed in the fuel electrode ~~support may be formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle, or may have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.~~ substrate of the single cell includes a trapezoid shape in which a rectangular, circular or rectangular protrusion is formed at an obtuse angle.

14. (Currently Amended) The cell according to claim 6, wherein ~~cross sections of the downwardly bent portions and the straight structure or the lattice structure of~~ a cross section morphology of the straight-line shaped or lattice-type shaped gas channels formed in the air electrode ~~support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.~~ substrate of the single cell includes a trapezoid

shape in which a rectangular, circular or rectangular protrusion is formed at an obtuse angle.

15. (Currently Amended) The cell according to claim 9, wherein ~~cross-sections of the downwardly bent portions and the straight structure or the lattice structure of~~ a cross section morphology of the straight-line shaped or lattice-type shaped gas channels formed in the electrolyte ~~support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.~~ substrate of the single cell includes a trapezoid shape in which a rectangular, circular or rectangular protrusion is formed at an obtuse angle.

16. (Previously Presented) The cell according to claim 2, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

17. (Previously Presented) The cell according to claim 3, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

18. (Previously Presented) The cell according to claim 4, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

19. (Previously Presented) The cell according to claim 5, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

20. (Previously Presented) The cell according to claim 6, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

21. (Previously Presented) The cell according to claim 7, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby

producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

22. (Previously Presented) The cell according to claim 9, wherein an electrolyte plate is produced in a structure in which four sides or two sides of corners are downwardly bent in an inverted U shape using an assembling powder of about 10μm through about 100μm using one or more solid oxide electrolyte materials selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, and lanthanum perovskite group, and the electrolyte support is implemented in such a manner that the single cells formed by coating a fuel electrode in a lower portion of the electrolyte flat portion and an air electrode in an upper portion of the electrolyte are formed in a triple layer or multiple layer structure.

23. (Previously Presented) The cell according to claim 10, wherein an electrolyte plate is produced in a structure in which four sides or two sides of corners are downwardly bent in an inverted U shape using an assembling powder of about 10μm through about 100μm using one or more solid oxide electrolyte materials selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, and lanthanum perovskite group, and the electrolyte support is implemented in such a manner that the single cells formed by coating a fuel electrode in a lower portion of the electrolyte flat portion and an air electrode in an upper portion of the electrolyte are formed in a triple layer or multiple layer structure.